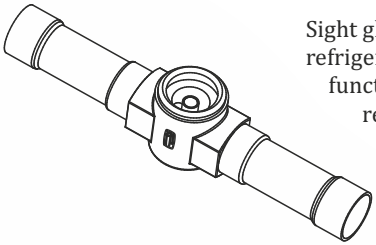
SIGHT GLASS FP-SG, FP-OG

Operation manual



Sight glass FP-SG designed to visually control condition of refrigerant in liquid lines of refrigeration systems. The main function of sight glass is to show if there is any liquid in the refrigerant, which allows to control effectiveness of filter-drier. According to the quantity of liquid in refrigerant the color of indicator changes from green (zero liquid) to yellow (high level of liquid).

SAFETY INSTRUCTION

⚠ Please read carefully this instruction. Elimination of this instructions may lead to breakdown of device, staff injury, and also to refrigeration system malfunctioning.

⚠ Installation, service and maintenance must be done by qualified staff with required knowledge and skills.

⚠ The use of sight glass with, ammonia and any flammable refrigerants is prohibited.

INSTALLATION INSTRUCTIONS

- Design of sight glass allows to use it in both flow directions and to install it in any position which provides comfortable visual control of the sight glass.
- It is recommended to install sight glass on liquid line after filter-drier and before solenoid valve or electronic thermo-expantion valve.
- Take off cup prior to installation.
- During soldering always cool down the body of sight glass so it's temperature do not exceed 150 C. In order to eliminate oxide generation blow it with a inert gas.
- After you finish installation make all the necessary tests according to PB 09-592-03 “Safety and organizational regulations of refrigeration system exploitation.

STORAGE

Store valves in manufacturer's packing in warehouse within temperatures between -40 and 50 C and 80% humidity. The presents of substances in the air that cause corrosion is strictly prohibited. Storage period – 3 years.

DISMANTLING AND UTILIZATION

Dismantle valve in the following sequence:

- Prior to dismantling valve make sure that pressure in the refrigeration circuit equals the surrounding's.
- Cut the connected part of the tube close to the sight glass.
- Avoid breathing in acid vapor and getting dirty oil/refrigerant on your skin.

Table 1. Specification

Specification	Value
Maximum operating pressure	45 bar
Testing pressure	58 bar
Flow temperature	от -50 °C до +80°C
Media compatibility (refrigerants)	CFC, HFC, HCFC do not use with R11 and ammonia
Media compatibility (oils)	mineral, alkylbenzene, synthetic oil
Case material	Brass
Tube material	Copper

Table 2. Moisture content indication

Refrigerant	Moisture content, ppm			
	Temperature +25 ˚C		Temperature +43 ˚C	
	Green/dry	Yellow/wet	Green/dry	Yellow/wet
R22	< 30	> 120	< 50	> 200
R134a	< 30	> 100	< 45	>170
R404A	< 20	> 70	< 25	> 100
R407C	< 30	> 140	< 60	> 225
R507	< 15	> 60	< 30	> 110

Table 3. Dimensions

Model	Connetctions, inches	L, mm	L_1, mm	H, mm	H_1, mm	øD, mm	ød, mm	Weight, kg
FP-OG-038	3/8" SAE (5/8"-18 UNF)	70		28	14	27		0,1
FP-SG-038	3/8" (10 mm)	119	9	24	15	27	9,53	0,12
FP-SG-012	1/2" (12 mm)	146	10	29	17	27	12,7	0,16
FP-SG-058	5/8" (16 mm)	146	12	31	19	27	15,9	0,20
FP-SG-078	7/8" (22 mm)	173	14	38	22	32	22,3	0,34